



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,121	01/19/2006	Kazuhiro Abe	062015	6145
38834 7590 05/07/2010 WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036			EXAMINER QIAN, YUN	
			ART UNIT 1793	PAPER NUMBER
			NOTIFICATION DATE 05/07/2010	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentmail@whda.com

<p align="center">Advisory Action Before the Filing of an Appeal Brief</p>	<p>Application No. 10/565,121</p>	<p>Applicant(s) ABE ET AL.</p>	
	<p>Examiner YUN QIAN</p>	<p>Art Unit 1793</p>	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 29 April 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See continuation sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: _____.
- Claim(s) objected to: _____.
- Claim(s) rejected: 1-9, 20-24.
- Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See continuation sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/Melvin Curtis Mayes/
Supervisory Patent Examiner, Art Unit 1793

Continuation of Box 3 and Box 11. NOTE: Claims 1 and 8-9 are amended to further limit the third layer "consisting of copolymer of FEP containing photocatalyst at least of titanium oxide coated on said second fluorocarbon resin layer". The amendment changes the scope of the claim and requires new consideration and search.

In response to applicant's argument that Domoto et al. (JP 09-207289) does not disclose fluorocarbon resin layers comprising a combination of the 2 or more different fluorocarbon resins in a sheet, which is a feature of the presently claimed invention, and there is no reason or motivation to combine teachings of Domoto et al and Enomoto et al (Remarks, pages 10-11 and 16), the Examiner respectfully disagrees.

As discussed in the final office action mailed on January 29, 2010, Domoto et al. discloses a film structural material containing (1) a silicone resin coated glass fibers (applicant's substrate), (2) coating with fluorine resin (applicant's 1st layer) on a substrate, (3) forming fluorine resin and glass beads layer from PTFE powder (applicant's 2nd layer), (4) coating with the fluorine resin and photocatalyst titanium oxide fine particles (applicant's 3rd layer) ([Abstract] and [Solution]). In addition to polytetrafluoroethylene (PTFE), copolymers such as tetrafluoroethylene-FEP, tetrafluoroethylene-PFA, etc. are also used to form the fluoro-resin (abstract, and [MEANS]/ [0013]).

Although Domoto et al. does not specifically disclose exposing photocatalyst (TiO₂) on copolymer of tetrafluoroethylene-hexafluoropropylene as per applicant claims 1 and 8-9, Enomoto et al. teaches a composition of a toxic gas treatment sheet comprising a 1st layer containing a PTFE and photocatalyst particles (TiO₂), and a 2nd layer containing PTFE and FEP (a melting point lower than PTFE) ([Abstract] and [Solution]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Domoto et al. and PTFE-FEP resin of Enomoto et al. to obtain the invention as specified in the presently application, motivated by the fact that the mechanical strength of resulting sheet is improved ([ABSTRACT] and [DETAILED DESCRIPTION]/ [0015]-[0016]). Therefore, the subject matter of the instant application as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art.

Applicants further argue that the possibility of a skilled artisan achieving the present application is not sufficiently, based on an exponential number of possible fluorocarbon resin layer combination disclosed by Domoto et al. Domoto et al. teaches away from the three layers of fluorocarbon resin features of the presently application by disclosing examples and drawings wherein each layer containing only PTFE, for example, the layer 5 taught by Domoto et al. contains PTFE and photocatalyst powder and its weldability cannot achieve at least the feature of the instant application. (Remarks, pages 11-13 and 15).

The Examiner respectfully submits Domoto et al. indeed discloses utilizing the fluoro-resin including copolymers such as tetrafluoroethylene-FEP, tetrafluoroethylene-PFA, etc. as the instant application ([MEANS]/ [0013]). Since the combined reference (Domoto et al. and Enomoto et al.) teach the same film structural material as the recited claims, the physical properties, such as water repellent, peeled off rate and thermal weldability, would necessarily follow.

Applicants arguments that Enomoto et al. does not teach or provide any reason for achieving a layer comprising FEP and TiO₂ (Remarks, page 15), it is not found persuasive, because one can not show non-obviousness by attacking references individually, wherein the rejections are based on the combination of three references of Domoto et al. and Enomoto et al. As discussed above, Domoto et al. teaches a fluorocarbon resin layer (i.e. PTFE-FEP) containing TiO₂. Therefore, the rejection is proper and stands.